

CLAIMS

I claim:

1 1. An illuminated retractable leash, comprising:
2 a housing having a grip portion;
3 a spring-based spool rotatably supported in said housing;
4 an extendible roll of electroluminescent wire wound around
5 the spool, the wire having a free end adapted for attachment to
6 a pet collar; and
7 a DC to AC power inverter, the electric output thereof
8 selectively connected to one end of the electroluminescent wire.

1 2. The illuminated retractable leash according to claim
2 1, further comprising a DC input jack.

1 3. The illuminated retractable leash according to claim
2 1, further comprising a stop mechanism for engaging said spool
3 and for blocking the extension or winding up of said
4 electroluminescent wire about said spool.

1 4. The illuminated retractable leash according to claim
2 1, further comprising a printed circuit board disposed in said
3 housing, said DC to AC power inverter mounted thereon.

1 5. The illuminated retractable leash according to claim
2 4, wherein said printed circuit board is centrally mounted to a
3 lateral surface of said spool, whereby said printed circuit
4 board rotates in conjunction with said spool.

1 6. The illuminated retractable leash according to claim
2 1, further comprising a battery holder capable of holding at
3 least one battery, said battery holder having electrical leads
4 selectively connected to said inverter.

1 7. The illuminated retractable leash according to claim
2 6, wherein said battery holder is disposed on said printed
3 circuit board.

1 8. The illuminated retractable leash according to claim
2 1, wherein said spool is transparent and at least part of said
3 housing is transparent.

1 9. The illuminated retractable leash according to claim
2 1, further comprising a switch electrically connected to said
3 inverter operative to apply power to said electroluminescent
4 wire.

1 10. An illuminated retractable leash comprising;
2 a housing;
3 a spring-biased spool rotatably supported in said housing;
4 an extendible roll of electroluminescent wire wound around
5 said spool, the wire having a free end adapted for attachment to
6 a pet collar;
7 a stop mechanism for engaging said spool and for blocking
8 the extension or winding up of the electroluminescent wire about
9 said spool;
10 a printed circuit board centrally mounted to a lateral
11 surface of said spool, whereby said printed circuit board
12 rotates in conjunction with said spool; and
13 a DC to AC inverter, the electric output thereof
14 selectively connected to an end of the electro-luminescent wire.

1 11. The illuminated retractable leash according to claim
2 10, further comprising a battery holder mounted to said printed
3 circuit board, said battery holder having electrical leads
4 selectively supplying power to said inverter.

1 12. The illuminated retractable leash according to claim
2 10, wherein said spool and at least part of said housing is
3 transparent.

1 13. An illuminated retractable leash comprising;
2 a housing having a grip portion;
3 a spring-biased spool rotatably supported in said housing,
4 said spool having a pair of electrically conducting surfaces
5 concentrically disposed on a lateral surface of said spool;
6 an extendible roll of electroluminescent wire wound around
7 said spool, said electroluminescent wire having at least two
8 conductors, said conductors electrically connected to said pair
9 of concentrically disposed conducting surfaces, said wire
10 further having a free end adapted for attachment to a pet
11 collar;
12 a retractor mechanism whereby slack section of said wire
13 can be taken up automatically by said spring-based spool when
14 the maximum extension length of said wire is not being used;
15 a pair of electric contacts mounted to said housing and
16 positioned to make continuous electric contact with said pair of
17 concentrically disposed conducting surfaces as the spool
18 rotates;
19 a printed circuit board disposed in said housing, said
20 printed circuit board having a DC to AC power inverter, the

21 electric output thereof connected to said pair of housing
22 mounted electric contacts; and

23 a battery holder disposed in said housing, said battery
24 holder having electrical leads selectively supplying power to
25 said inverter.

1 14. The illuminated retractable leash according to claim
2 13, wherein said spool is transparent and at least part of said
3 housing is transparent.